U.S. Antarctic Marine Living Resources Program

2010-2011 Weekly Field Reports Cape Shirreff, Livingston Island

Volume 17 February 28, 2011

Seabirds:

- 1. Chinstrap chicks have finished fledging this week. On 22 February we finished weighing fledglings immediately before they depart to obtain a measure of condition. We weighed a total of 327 fledglings with an average mass of 3233g (SD=313). Of the 327 fledglings weighed 56 were banded. The heaviest fledgling weighed in at 4300g and the lightest was 2250g.
- 2. We continued collection of 48 day measurements of brown skua chicks this week. We collected these weights and measurements at 48 days of age to determine their sex and to assess their condition. Of the nineteen pairs of brown skuas that we are monitoring we have completed 48 day measurements on all but one territory, 1 nest is still active and 7 nests have failed.
- 3. We have deployed 15 PTTs on freshly molted chinstrap penguins and three on gentoo penguins as part of the overwinter study. We plan on deploying 6 more instruments on gentoos.
- 4. A significant portion of the week was spent compiling and proofing data, along with general camp maintenance.

Pinnipeds:

- 5. As of 21 February five attendance mother/pup pairs remain in the study out of the original 30. The mean trip length this week was 3.52 days, similar to the last several weeks.
- 6. Fur seal diet sampling was completed this week with the collection of the final 10 scat samples from areas of suckling females.
- 7. We suspended the systematic surveys of defined areas of the Cape for the 500 per annum fur seals tagged as pups this week on 21 February. This will give us a measure of tags sighted per unit of effort for different cohorts and for different areas of the Cape.
- 8. We tagged more than 400 pups so far and still have a few to tag, as part of the 500 new tags that we put on pups every year.
- 9. We recovered two TDR (time-depth recorder) from adult female leopard seals this week. The TDRs have been recording dive information for the past month. During most of this time the seals have been gone from the Cape and the dive data are very interesting.

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- 10. As of today we have deployed 5 ARGOS PTTs (Platform Terminal Transmitters) on well-molted adult female leopard seals. This will give us their locations and movements overwinter. We have two remaining PTTs to deploy so hopefully in the next few days we can complete leopard seal deployments.

Weather:

11. This week we had one of our windiest days for the season with gusts to 84mph. The temperature peaked at 7.3°C, the low was 0.4°C and the mean was 3.0°C; making this the warmest week for this season. Mean wind speed for the week was 16.1 with a max. gust of 84.0 mph. The winds have been approximately 22% out of the east and 78% out of the west. Precipitation for this week was 0.56 inches, bringing the total to 5.01 inches for the season.

Camp:

- 12. The wind storm earlier in the week caused some minor damages at the camp. It blew some water barrels off the deck and downed our SSB wire antenna. However, we were able to recover everything and remount the antenna the following day.
- 13. This week we continued camp maintenance duties, by starting the long process of inventorying all camp, food, and research supplies.
- 14. Our camp is running smoothly and all power and communication systems are in operation. Daily communications have been established with Palmer Station on the single side band radio, as well as with the Moana Wave, and we are scheduling our pick up in 10 days or so.
- 15. We are still waiting on the fur seals to be further molted in order to deploy overwinter instruments (ARGOS PTTs) on 12 adult females. Hopefully the molt will be complete for some animals soon.



- 16. The leopard seal captures have been going really well. The drug combination seems to be reliable and allow a sedation/anesthesia to work safely around these animals. This week we weighed the lightest leopard seal so far, 350 Kg. We still have two instruments to deploy, which I hope we will be able to do in the next few days.
- 17. We are getting excited to be picked up in 10 days, and we are busy prioritizing and making sure that all our tasks for closing camp will be accomplished in time for the arrival of the Moana Wave.

Submitted by AMLR staff currently residing at the Cape Shirreff field camp, Livingston Island.





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